

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**TRO Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Valley Proteins, Inc.  
Emporia, Virginia  
Permit No. TRO-60963

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Valley Proteins, Inc. has applied for a Title V Operating Permit for its rendering facility at 25170 Val-Pro Drive, Emporia, Virginia. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_

Date: June 20, 2005

Air Permit Manager: \_\_\_\_\_

Date: June 20, 2005

Deputy Regional Director: \_\_\_\_\_

Date: June 20, 2005

Attachment A: April, 29, 2005 Minor NSR Permit

## **FACILITY INFORMATION**

### Permittee

Valley Proteins, Inc.  
P.O. Box 3588  
Winchester, Virginia 22604

### Facility

Valley Proteins-Emporia  
25170 Val-Pro Drive  
Emporia, Virginia 23847

County-Plant ID No. 51-175-00048

## **SOURCE DESCRIPTION**

SIC Code 311613 & 311119. Animal parts, animal by-products, and restaurant grease are cooked in one large continuous cooker and two small batch tallow rendering cookers, using steam from two boilers, to produce to produce meal solids and finished animal vegetable oil product. Liquid products are stored in storage tanks, and the meal products are stored in silos until products are hauled away by truck or railcar. The exhaust air from all cooker systems is routed to a venturi scrubber and then most of the time ( $\approx 85\%$ ) into one of the boilers. At times ( $\approx 15\%$ ) when both boilers are operating at low fire, exhaust air from the venturi scrubber are routed to a cross flow two stage packed scrubber.

This facility is a Title V major source of SO<sub>2</sub>. This source is located in an attainment area for all pollutants. The facility is permitted under minor NSR permit issued on April 29, 2005.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
B-1	B1E-1	Cleaver Brooks, CB-700, 1980	29.3 MM Btu/hr	N/A	N/A	N/A	04/29/05
B-2	B2E-2	Cleaver Brooks, CB-700, 1980	29.3 MM Btu/hr	N/A	N/A	N/A	04/29/05
<b>Process A Continuous Cooker</b>							
CC-1	B1E-1 or B2E-2 (85%)	Dupps 320U continuous cooker, 2003, with Kennedy Tank & MFG. Co. condenser (2005).	25 tons/hr	A.C. Corp venturi scrubber, 1980. (B-1 or B-2 A.C. Corp Firebox, 1980)	VS-1 (B-1,2)	PM (Odor)	04/29/05 (04/29/05, State Only)
	or CFS1E-1 (15%)	Dupps 320U continuous cooker, 2003, with Kennedy Tank & MFG. Co. condenser (2005).	25 tons/hr	A.C. Corp venturi scrubber, 1980. (A.C. Corp RDS-100 Cross Flow Scrubber, 1980)	VS-1 (CFS-1)	PM (Odor)	04/29/05 (04/29/05, State Only)
<b>Process B Batch Cookers</b>							
RC-1 & RC-2	B1E-1 or B2E-2 (85%)	Two Dupps tallow batch cookers (1980), with Kennedy Tank & MFG. Co. condenser (2005).	1.75 tons/hr each	A.C. Corp venturi scrubber, 1980. (B-1 or B-2 A.C. Corp Firebox, 1980)	VS-1 (B-1,2)	PM (Odor)	04/29/05 (04/29/05, State Only)
	or CFS1E-1 (15%)	Two Dupps tallow batch cookers (1980), with Kennedy Tank & MFG. Co. condenser (2005).	1.75 tons/hr each	A.C. Corp venturi scrubber, 1980. (A.C. Corp RDS-100 Cross Flow Scrubber, 1980)	VS-1 (CFS-1)	PM (Odor)	04/29/05 (04/29/05, State Only)

(9 VAC 5-80 110 and Condition 2 of 04/29/05 permit)

\*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

## EMISSIONS INVENTORY

Emissions are summarized in the following tables.

Actual Emissions

	2004 Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>
Boilers	0.1	2.2	146.8	7.6	24.4
Cookers	2.6	0	0	0.6	0
Total	2.7	2.2	146.8	8.2	24.4

### EMISSION UNIT APPLICABLE REQUIREMENTS—boilers and cookers

- A. Limitations  
Boilers and cookers—see NSR Permit dated 04/29/05.
- B. Monitoring  
Boilers and cookers—see NSR Permit dated 04/29/05.
- C. Recordkeeping  
Boilers and cookers—see NSR Permit dated 04/29/05.
- D. Reporting  
Boilers and cookers—see NSR Permit dated 04/29/05.
- E. Testing  
Boilers and cookers—see NSR Permit dated 04/29/05.

### STATE-ONLY ENFORCEABLE REQUIREMENTS FOR ODOR

This section is included pursuant to 9 VAC 5-80-1120 F., and is not required under the federal Clean Air Act or under any of its applicable federal requirements. This section is only enforceable by the Commonwealth of Virginia State Air Pollution Control Board and its designees.

- A. Limitations  
Cookers and building—see NSR Permit dated 04/29/05.
- B. Monitoring  
Cookers and building—see NSR Permit dated 04/29/05.
- C. Recordkeeping  
Cookers and building—see NSR Permit dated 04/29/05.

- D. Reporting  
Cookers and building—see NSR Permit dated 04/29/05

**Streamlined Requirements**

The following conditions in the minor NSR permit of 04/29/2005 have been streamlined into the title V permit by using the title V boilerplate language on the same topic—NSR references were added to the title V regulatory citations.

- Condition 1. Used title V condition VII.K
- Condition 2. Used title V condition II
- Condition 20. Used title V condition VII.R
- Condition 22. Used title V condition VII.G
- Condition 25. Used title V condition VII.W
- Condition 26. Used title V condition VII.U
- Condition 27. Used title V condition VII.M
- Condition 28. Used title V condition VII.T

## **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

### **Comments on General Conditions**

#### **B. Permit Expiration**

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general condition cite(s) the Article(s) that follow(s):  
Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources]

This general condition cites the sections that follow:

9 VAC 5-80-80. Application  
9 VAC 5-80-140. Permit Shield  
9 VAC 5-80-150. Action on Permit Applications]

#### **F. Failure/Malfunction Reporting**

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

#### **J. Permit Modification**

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources  
9 VAC 5-80-190. Changes to Permits.  
9 VAC 5-80-260. Enforcement.  
9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources  
9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas  
9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas]

#### **U. Malfunction as an Affirmative Defense**

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

#### **Y. Asbestos Requirements**

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:

40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.

40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9 VAC 5-60-70. Designated Emissions Standards

9 VAC 5-80-110. Permit Content

#### **CONFIDENTIAL INFORMATION--None**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

**CAM:** DEQ has approved the change that the condensers are an integral part of the cooker operations. This makes the PTE of each cooker, with the permit limits on throughput, less than 100 tons/yr for any pollutant before any control equipment. CAM is not applicable to any emissions unit at the facility.

#### **INAPPLICABLE REQUIREMENTS**

40 CFR 63, Subpart DDDDD, Industrial/Commercial/Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants, is not applicable because the source is not a major source for HAPS.

**Insignificant units:**

*The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:*

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
MS-1, MS-2	Meal storage silo	9 VAC 5-80-720B	PM	N/A
T-1	No. 6 oil tank 30,000 gal (1982)	9 VAC 5-80-720B	VOC	N/A
T-2	No. 6 oil tank 20,000 gal (1980)	9 VAC 5-80-720B	VOC	N/A

<sup>1</sup>The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

**PUBLIC PARTICIPATION, CONCURRENT review.**

The draft and proposed permit was placed on public notice in the Virginian Pilot from May 5, 2005 to June 4, 2005. Comments: None

Draft and proposed permit sent to affected state (NC) on: May 5, 2005.

Draft and proposed permit to EPA: May 5, 2005 Comments: None